[0130] In this way, the refrigerator may inform a remote user that an expected date of rancidity is imminent, so that the user can drink the fermented liquor before the fermented liquor is rancidified.

[0131] FIG. 11 is a flowchart illustrating a method of controlling a refrigerator, according to another embodiment of the present disclosure, and more particularly, FIG. 11 is a flowchart illustrating a method of transmitting a rancidity warning message, according to another embodiment of the present disclosure.

[0132] First, the controller 300 may determine whether fermented liquor having a sensed degree of rancidity has been stored in the storage space 10, in operation 1000. If the controller 300 determines that no fermented liquor having the sensed degree of rancidity is found in the storage space 10, the controller 300 may terminate the process.

[0133] If the controller 300 determines that fermented liquor having a sensed degree of rancidity has been stored in the storage space 10, the controller 300 may determine whether a present date falls within a predetermined time period before an expected date of rancidity of the fermented liquor, in operation 1010. The expected date of rancidity may have been decided in advance by the sensed degree of rancidity.

[0134] If the controller 300 determines that the present date does not fall within the predetermined time period before the expected date of rancidity, the controller 300 may continue to determine whether the present date falls within the predetermined time period before the expected date of rancidity.

[0135] However, if the controller 300 determines that the present date falls within the predetermined time period before the expected date of rancidity, the controller 300 may determine the storage space 10 in which the fermented liquor is currently stored, in operation 1020. Information about the storage space 10 in which the fermented liquor is stored may have been input in advance by a user.

[0136] After determining the storage space 10 in which the fermented liquor is stored, the controller 300 may determine whether there is another storage space that is maintained at lower temperature than the storage space 10, in operation 1030. If the controller 300 determines that there is no storage space that is maintained at lower temperature than the storage space 10, the controller 300 may terminate the process.

[0137] However, if the controller 300 determines that there is another storage space that is maintained at the lower temperature than the storage space 10, the communication unit 600 may transmit a position movement guide message for guiding a user to move the fermented liquor to the other storage space to an external device, in operation 1040.

[0138] In this way, the refrigerator may guide a remote user to move the fermented liquor to the storage space that is maintained at the lower temperature, when the expected date of rancidity is imminent, so that the user can move the fermented liquor to the storage space maintained at the lower temperature to thus delay rancidity of the fermented liquor.

[0139] FIG. 12 is a flowchart illustrating a method of controlling a refrigerator, according to another embodiment of the present disclosure, and more particularly, FIG. 12 is a flowchart illustrating a method of cooling the inside air of a storage space to rancidity delay temperature.

[0140] First, the controller 300 may determine that fermented liquor having a sensed degree of rancidity has been stored in the storage space 10, in operation 1100. If the controller 300 determines that no fermented liquor having the sensed degree of rancidity is found in the storage space 10, the controller 200 may terminate the process.

[0141] If the controller 300 determines that fermented liquor having a sensed degree of rancidity has been stored in the storage space 10, the controller 300 may determine whether a present date falls within a predetermined time period before an expected date of rancidity of the fermented liquor, in operation 1110. The expected date of rancidity may have been decided in advance by the sensed degree of rancidity.

[0142] If the controller 300 determines that the present date does not fall within the predetermined time period before the expected date of rancidity, the controller 300 may continue to determine whether the present date falls within the predetermined time period before the expected date of rancidity.

[0143] However, if the controller 300 determines that the present date falls within the predetermined time period before the expected date of rancidity, the controller 300 may cool the inside air of the storage space 10 to predetermined rancidity delay temperature, in operation 1120. Herein, the predetermined rancidity delay temperature may mean the inside temperature of the storage space 10 for delaying the expected date of rancidity of the corresponding fermented liquor. The predetermined rancidity delay temperature may have been decided in advance based on the sensed degree of rancidity.

[0144] In this way, the refrigerator can delay rancidity of the fermented liquor without any user's manipulation.

[0145] In the refrigerator and the control method thereof according to an aspect, state information of fermented liquor can be provided to help a user drink the fermented liquor in an optimum state.

[0146] In the refrigerator and the control method thereof according to another aspect, a storing method corresponding to state information of fermented liquor can be provided to a user, or a storing method can be automatically changed to store the fermented liquor in an optimum state.

[0147] Although a few embodiments of the present disclosure have been shown and described, it would be appreciated by those skilled in the art that changes may be made in these embodiments without departing from the principles and spirit of the disclosure, the scope of which is defined in the claims and their equivalents.

What is claimed is:

- 1. A refrigerator comprising:
- a storage space configured to store fermented liquor;
- a cooling unit configured to cool inside air of the storage space;
- a rancidity sensor configured to sense a degree of rancidity of the fermented liquor; and
- a communication unit configured to transmit state information of the fermented liquor created based on the degree of rancidity to a predetermined external device.
- 2. The refrigerator according to claim 1, wherein the rancidity sensor senses the degree of rancidity of the fermented liquor, based on mass of the fermented liquor in a gaseous state absorbed on a plurality of different polymers.